

CLAIMS:

1. A rotary tubular kiln comprising:
  - a heating tunnel wall defining an interior heating tunnel;
  - 5 an externally heatable, rotatable tube disposed within and generally surrounded by said heating tunnel wall, said rotatable tube defining an outer surface;
  - a longitudinal sealing member disposed within said interior heating tunnel, said sealing member extending between said tunnel wall and
  - 10 said outer surface of said rotatable tube, said sealing member positioned within said interior heating tunnel to define an entry side and an exit side of said interior heating tunnel, said sealing member including (i) a rigid portion positioned at a distance from said rotating tube, and (ii) a flexible portion positioned adjacent to said outer surface of said rotating tube.
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2. The rotary tubular kiln according to claim 1 wherein said tunnel wall is bowl-shaped.
3. The rotary tubular kiln according to claim 1 wherein said sealing
- 20 member is disposed below said rotatable tube.
4. The rotary tubular kiln according to claim 1, wherein said rigid portion comprises a refractory material.
5. The rotary tubular kiln according to claim 1, wherein said flexible
- 25 portion comprises ceramic fibers.
6. The rotary tubular kiln according to claim 1, wherein said flexible portion includes a plurality of strips.
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7. The rotary tubular kiln according to claim 6 wherein at least a portion of said plurality of strips are joined to one another.

8. The rotary tubular kiln according to claim 6 wherein said strips are joined to one another by use of a cement.

9. The rotary tubular kiln according to claim 6 wherein said strips  
5 are formed from an elastic and compressible material.

10. The rotary tubular kiln according to claim 6, wherein at least a portion of said plurality of strips are arranged to form at least one stack of strips.  
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11. The rotary tubular kiln according to claim 6 wherein said plurality of strips extend generally perpendicular to the axis of said rotatable tube.

12. A method for producing a longitudinal sealing member in a  
15 rotary tubular kiln, said kiln including (i) a heating tunnel wall defining an interior heating tunnel, and (ii) a rotatable tube disposed within said interior heating tunnel, said method comprising:

forming a wall within said interior heating tunnel, said wall extending generally parallel to a longitudinal axis of said tube, said wall formed from a  
20 rigid material;

providing a plurality of flexible strips; and

affixing said plurality of flexible strips to said wall such that said strips are positioned adjacent to an outer surface of said tube.

25 13. The method according to claim 12 wherein said plurality of flexible strips are formed from an elastic material.

14. The method according to claim 12 further comprising:  
joining said plurality of flexible strips to one another.

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15. The method according to claim 12 wherein said step of affixing is performed by pressing said strips within said wall.

16. The method according to claim 12 wherein said step of affixing said plurality of strips is performed such that after affixing, said strips extend in a direction generally perpendicular to said longitudinal axis of said tube.

- 5           17. The method according to claim 16 wherein said step of affixing said plurality of strips is performed such that after affixing, said strips are also compressed in a direction generally parallel to said longitudinal axis of said tube.